

**Remarks**

**I. Introduction**

This response is submitted in reply to the outstanding Office Action mailed July 15, 2009.

Claims 8 and 18 were objected to because of a misprint.

Claim 13 was objected to because of a missing word.

Claims 1-4, 7-15, and 17-21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2001/0021176 (“Mimura”) in view of U.S. Patent No. 6,515,989 (“Rönneke”).

Claims 5-6, and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mimura in view of Rönneke and in further view of U.S. Patent Publication No. 2002/0105911 (“Pruthi”).

Applicants amended claims 8, 13 and 18 to overcome the objections and respectfully traverse the rejections based on the remarks below. These amendments raise no new issues and should be entered and considered at this juncture. Applicants respectfully request reconsideration and allowance of all the pending claims, namely claims 1-21.

**II. Applicants’ Response to the Claim Objections**

*A. Claims 8 and 18 Objections*

Claims 8 and 18 were objected to because of a misprint. Applicants’ have amended claims 8 and 18 to remove the apparent misprint. Accordingly, applicants respectfully request that the objections of claims 8 and 18 be withdrawn.

*B. Claim 13 Objection*

Claim 13 was objected to because there was a missing word. Consistent with the Examiner’s suggestion, applicants have amended claim 13 to recite the word “has” before the word “Ethernet.” Accordingly, applicants respectfully request that the objection of claim 13 be withdrawn.

III. Applicants' Response to the 35 U.S.C. § 103(a) Rejections of the Independent Claims

*A. Introduction*

Independent claims 1, 8, 12 and 18 are currently pending and were rejected under 35 U.S.C. § 103(a) as being unpatentable over Mimura in view of Rönneke.

Claim 1 recites a packet data separator that facilitates providing a wireless data service by a service server. The packet data separator is configured to separate user packet data transmitted between the service server and a mobile communication exchange or a packet controller. Claim 1 also recites, *inter alia*, that the packet data separator is configured to receive the user packet data after an RP registration is provided. Independent claims 8, 12 and 18 are similar to claim 1 and likewise recite receiving the user packet data “after an RP registration is provided.”

Mimura suggests a “packet switch [that] identifies a communication flow carried across an IP network, observes the communication flow, and acquires statistics data thereof, such as the number of packets that passed through the switch, the number of discarded packets, time at which the packets arrived at the switch, and time at which the packets were sent out from the switch.” Mimura, abstract.

Like the first Office Action the Examiner again acknowledges that “Mimura does not explicitly teach of using of a wireless data service through a mobile communication network and therefore does not disclose the registration of subscriber’s device to use such service.” Office Action, page 4. To fill this deficiency of Mimura, the Examiner cites Rönneke, and alleges that Rönneke “discloses [1] a mobile communication network with architecture that inter-works with existing packet data networks and provides data series to subscriber’s mobile station” and “[2] the basic functions of its mobile communication network components which include authentication and management of mobile stations ....” Office Action, page 4.

*B. Even if all the Examiner’s statements in the final Office Action are accepted as true, the Mimura-Rönneke combination would still fail to suggest each recitation of applicants’ independent claims.*

While applicants reserve the right to contest (in a future response or during an appeal) each of the statements alleged in the Office Action, to expedite allowance of this case, applicants are willing to accept arguendo (for now) the Examiner’s statements in the Office Action as true and accurate. But even upon accepting all the Examiner statements as true and accurate, the

Mimura-Rönneke combination would still fail to show a packet data separator that is configured to receive the user packet data after an RP registration is provided, as recited by applicants' independent claims.

As mentioned above, the Examiner already twice acknowledged that this is not shown by Mimura, but only cites Rönneke for what Rönneke actually does disclose: [1] "a mobile communication network with architecture that inter-works with existing packet data networks and provides data series to subscriber's mobile station" and [2] "the basic functions of its mobile communication network components which include authentication and management of mobile stations ...." Office Action, page 4. There is patentable difference, however, between what is recited in applicants' claims (i.e., receiving user packet data after an RP registration is provided) and Rönneke's cited disclosures [1] and/or [2]. If these two disclosures of Rönneke are construed in a light most favorable to the position taken by Examiner, Rönneke's disclosure [1] only suggests a system that can work with preexisting mobile systems, and Rönneke's disclosure [2] only suggests authenticating and managing mobile devices. But, even when Rönneke is read in the light favorable to the position taken by the Examiner, neither Rönneke disclosure [1] nor Rönneke disclosure [2] suggests receiving user packet data after an RP registration is provided. In fact, Rönneke does fail to suggest when user packet data would be received, let alone when user packet data would be received relative to Rönneke's "authentication" check.<sup>1</sup>

Rönneke only mentions that "all packets transported at a physical layer of the network" are retrieved and processed (Rönneke, col. 3, lines 10-11), and that "the SGSNs 18 perform authentication, ciphering and identification check, mobility management, and logical link management for the mobile stations 12" (Rönneke, col. 3, lines 60-63, which the Examiner bases the rejections; see Office Action, page 4). But this disclosure of Rönneke does not suggest whether all the packets are transported prior to, during, or after "the SGSNs 18 perform authentication, ciphering and identification check, mobility management, and logical link management for the mobile stations 12." Rönneke, col. 3, lines 60-63. Moreover, the Examiner fails to present any evidence as to where Rönneke shows or how Rönneke could be interpreted as

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<sup>1</sup> If necessary in a future response or appeal proceeding, applicants reserve the right to distinguish applicants' claimed RP Registration from the portion of Rönneke cited by the Examiner to show applicants' claimed RP Registration.

showing applicants' claimed feature of "the packet data separator is configured to ... receive the user packet data after an RP registration is provided." Applicants' claim 1.

One of the patentable advantages of applicants' claimed "packet data separator [being] configured to ... receive the user packet data after an RP registration is provided" is that applicants' claimed traffic analyzer will only analyze the user packet data received after an RP registration is provided. Therefore, only the pertinent user packet data is analyzed (rather than all the user packet data, as in Rönneke). This is important, especially when the analyzed data is then stored in a statistics reference unit and made available to the subscriber if desired.

Accordingly, because Rönneke fails to suggest when user packet data would be received, let alone if user packet data would be received after an RP registration is provided, and because Mimura fails to suggest a mobile communication system, let alone receiving packet data after an RP registration is provided, the Mimura-Rönneke combination fails to show a "packet data separator [being] configured to ... receive the user packet data after an RP registration is provided" as recited by applicants' independent claim 1. Independent claims 8, 12 and 18 are similar to claim 1 and likewise recite receiving the user packet data "after an RP registration is provided." Therefore, independent claims 1, 8, 12 and 18 are patentable over the Mimura-Rönneke combination.

*C. The Mimura-Rönneke combination cannot be combined as proposed by the Examiner.*

Applicants noted in the Reply to the first Office Action, "it would not be obvious to one of ordinary skill in the art to configure Mimura's switch to receive user packet data after an RP registration is provided, because Mimura's switch is configured to acquire statistics of an IP network – not a mobile communications network." See Applicants' Reply to Office Action, filed April 15, 2009. In other words, one skilled in the art would not utilize the features of Mimura with a wireless system, regardless of whether that system was common knowledge to one of ordinary skill in the art.

In the outstanding final Office Action, the Examiner acknowledges, "Mimura does not explicitly teach of using of a wireless data service through a mobile communication network" (Office Action, page 4), but despite this, the Examiner still tries to combine Mimura with Rönneke. To support the combination of Mimura with Rönneke, the Examiner quotes the following portion of Rönneke:

The mode of operation of GSM communication systems is described in European Telecommunication Standard Institute (ETSI) documents ETS 300 573, ETS 300 574 and ETS 300 578. Therefore, the operation of the system 10 is described only to the extent necessary for understanding the present invention. Although the present invention is described as embodied in a GSM system, those skilled in the art would appreciate that a wide variety of other communication systems, such as those based on PDC, AMPS, D-AMPS, UMTS, or CDMA standards, may also be utilized. Similarly, the mobile packet data service of the invention may be based on other standards, such as CDPD, PPDC or UMTS packet data

Rönneke, col. 2, line 65 to col. 3, line 5 (see also, e.g., Office Action, page 5).

But, as acknowledged by the Examiner, Mimura is not designed for use with any mobile standard, including those referred to in Rönneke. One of ordinary skill in the art, at the time applicants' invention was made, would have believed that statistics provided by Mimura's IP switching hubs would not have been sufficient for analyzing mobile communications, like that of Rönneke. In fact, the background of applicants' specification specifically points out that:

Analysis of the packet data traffic in the above-configured IP network depends on the statistics provided by the IWF, the PDSN 40, *an S/H (switching hub) which is an IP instrument, or a router, but the statistics are insufficient for analyzing various types of packet data traffic since the statistics provide restricted statistical information to the user for the proper maximum performance of systems.*

Applicants' specification, paragraph [0010] (emphasis added).

Moreover, Rönneke also explains why IP switching hubs, such as Mimura's packet switch, are not sufficient for analyzing mobile communications.

As a result, convention IP routers, that support billing functions, are designed with integrated traffic and billing computing resources. ... If the billing function and the traffic function are integrated, however, these functions end up competing for the use [of] the same computing resource. ... *Accordingly, there is a need to provide a simple and cost effective mobile data service that is capable of providing billing function on a per-packet basis, without adversely effecting the traffic function of the network.*

Rönneke, col. 1, lines, 45-50 and col. 2, lines 1-3 and 10-13 (emphasis added).

In other words, IP network switches, like Mimura's switches, were known by those of ordinary skill in the art at the time of applicants' invention and they were known as being

insufficient for analyzing mobile communications' packet data traffic just as they were known years before when Rönneke was filed.

Accordingly, there was a long felt need for applicants' claimed inventions, and for at least this reason, independent claims 1, 8, 12 and 18 are not obvious in view of Mimura and Rönneke. Accordingly, independent claims 1, 8, 12 and 18 are patentable over the Mimura-Rönneke combination.

*D. Even if Mimura could be combined with Rönneke, the combination would produce a system that includes the Mimura packet switch that operates separate from the Rönneke Billing Data computing resource.*

Rönneke's "invention adds an independent computing resource with a separate Billing data function to the same Ethernet physical layer as that used by incoming and/or outgoing packets to the Traffic function computing resource 38." Rönneke, col. 4, lines 45-49. In other words, the entire thrust of Rönneke is to have a separate Billing Data computing resource as opposed to integrating various functionality of the Billing Data computing resource into an existing or well known traffic monitoring resource, such as Rönneke's traffic function computing resource 38 or Mimura's packet switch. Accordingly, if applicants' previous remarks do not persuade the Examiner and if Mimura could be combined with Rönneke, the combination would yield a system that includes two separate components that operate in parallel: the first being Mimura's packet switch, and the second being Rönneke's Billing Data computing resource.

Therefore, even if the Mimura-Rönneke combination is proper, the combination can be rebutted. In particular, Rönneke explicitly teaches away from the Examiner's suggested combination with Mimura, because Rönneke would be rendered useless for its intended purpose if Rönneke were combined with Mimura as suggested in the Office Action. Rönneke's Billing Data computing resource is explicitly designed to work in parallel with a traffic monitoring component, such as Mimura's packet switch. See, e.g., Rönneke, FIG. 2. In other words it goes against the teaching of Rönneke to integrate some of its Billing Data computing resource functionality in something like Mimura's packet switch.

"It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983)." MPEP § 2145.X.D. See also MPEP §§ 2141.02 and 2141.03. Accordingly, independent

claims 1, 8, 12 and 18 are patentable over the Mimura-Rönneke combination, since Rönneke teaches away from its combination of Mimura as suggested by the Examiner.

*E. Summary of responses to rejections of independent claims under 35 U.S.C. § 103(a).*

For at least these reasons, Mimura fails to render independent claims 1, 8, 12 and 18 unpatentable. Thus the rejections of independent claims 1, 8, 12 and 18 should be withdrawn and the claims should be allowed.

Reply to Rejections of Dependent Claims 2-7, 9-11, 13-17 and 19-21

For at least the foregoing reasons, independent claims 1, 8, 12 and 18 are patentable and, since claims 2-7, 9-11, 13-17 and 19-21 depend from and necessarily include all of the recitations of one of independent claims 1, 8, 12 and 18, the cited documents, whether taken alone or in combination, do not teach or suggest the system and methods of claims 1, 8, 12 and 18 for at least the same reasons as described above in conjunction with the respective independent claims. (“If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious.” *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); MPEP § 2143.) Accordingly, it is therefore submitted that the 35 U.S.C. § 103(a) rejections of claims 2-7, 9-11, 13-17 and 19-21 have been overcome.

Conclusion

In view of the remarks presented above, applicants submit that the present application is in condition for allowance. As such, the issuance of a Notice of Allowance is therefore respectfully requested. In order to expedite the examination of the present application, the Examiner is encouraged to contact applicants’ undersigned attorney in order to resolve any remaining issues.

In re: Kyoung-II SEO, et al.  
U.S. Appl. No.: 10/534,839

It is believed that no additional petitions or fees are required other than those provided for in the related papers being filed herewith. The papers accompanying this Reply authorize the payment of the necessary fees. However, in the event that any extension of time and/or other fees are necessary to allow consideration of this Reply, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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